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VOL III-NO 8

SURGEON'S CIRCULAR LETTER

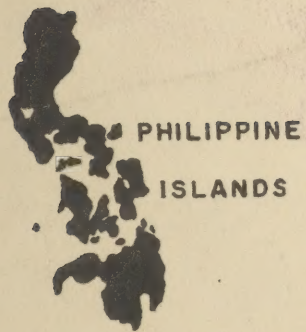
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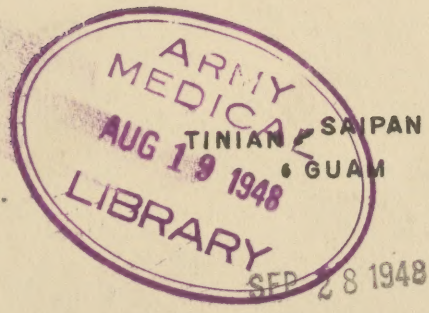
1 AUG 1948

KOREA
JAPAN
• OKINAWA

• IWO JIMA



PHILIPPINE
ISLANDS



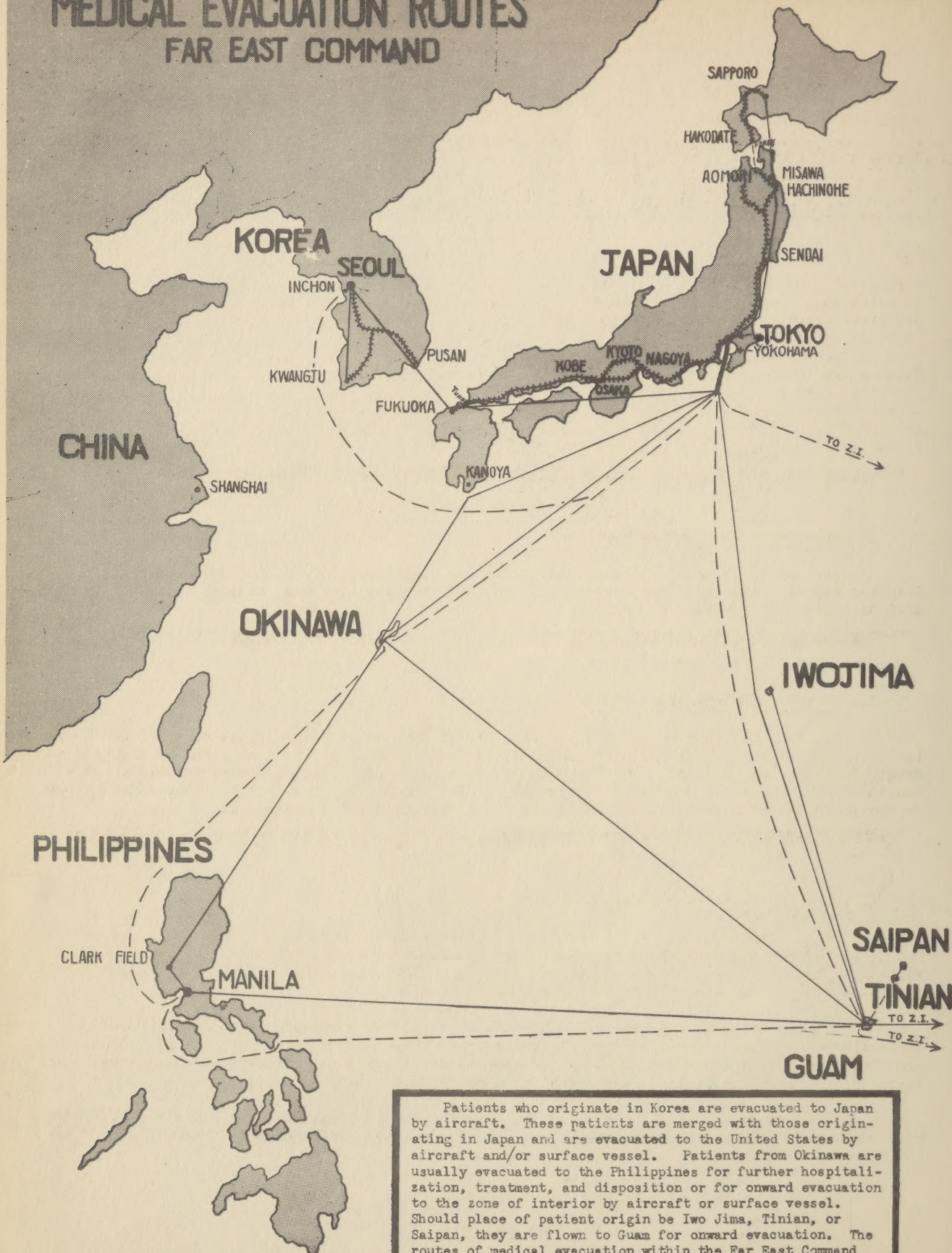
SAIPAN
TINIAN
GUAM

MED SEC GHQ FEC

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MEDICAL EVACUATION ROUTES FAR EAST COMMAND

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Patients who originate in Korea are evacuated to Japan by aircraft. These patients are merged with those originating in Japan and are evacuated to the United States by aircraft and/or surface vessel. Patients from Okinawa are usually evacuated to the Philippines for further hospitalization, treatment, and disposition or for onward evacuation to the zone of interior by aircraft or surface vessel. Should place of patient origin be Iwo Jima, Tinian, or Saipan, they are flown to Guam for onward evacuation. The routes of medical evacuation within the Far East Command are indicated as follows: Aircraft - solid lines; surface vessels - broken lines; trains - cross-hatched lines; converging point - heavy solid line.

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GENERAL HEADQUARTERS
FAR EAST COMMAND
MEDICAL SECTION

SURGEON'S CIRCULAR LETTER

APO 500

NUMBER8

1 August 1948

PART I

ADMINISTRATIVE

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I. Organization of the Medical Section

Arrival in Medical Section. Captain Vernon H. Loisel, MSC, of the 395th Station Hospital has been placed on temporary duty with the Personnel Division, Medical Section, General Headquarters, Far East Command.

II. Multiple Injections with One Syringe

It has been reported by consultants that at some hospitals multiple doses of penicillin (and occasionally streptomycin) were administered from the same syringe and given by changing the needle only for each patient. This is believed to be a dangerous procedure especially in this command where infectious hepatitis is prevalent. It is suggested that hospital commanders check on the technique of parenteral medication in their hospitals and dispensaries.

III. Dr. Blake Named to Research Position

Dr. Francis G. Blake, professor of medicine at Yale University, has been named chairman of the Research and Development Board's new Committee on Medical Science. Dr. Blake is consultant to the Army Surgeon General and the Army Epidemiological Board. He is well known for his studies of pneumonia, penicillin therapy and epidemic diseases.

In addition to the chairman, the committee will be composed of two civilian medical men and not more than two members each from the Departments of the Army, Navy and Air Force. The group will survey, analyze and evaluate all aspects of research and development activities in the field of medical and allied sciences within the National Military Establishment.

Dr. Vannevar Bush, Chairman of the Research and Development Board, said the Blake Committee will work closely with the Hawley Committee in research and development activities. The

Hawley Committee was set up recently by the Secretary of Defense to review all activity in the Military Establishment relating to medicine and allied sciences.

IV. Integration of Army Nurses

Many nurses in the Far East Command have asked for information regarding the results of the program on integration of Army nurses. The May issue of "The Bulletin of the U. S. Army Medical Department", page 410, contains the objectives used in selecting applicants for commissioning in the Regular Army.

V. Care of the Newborn Baby

A conference was held in the Office of the Surgeon, Far East Command, 18 June 1948, concerning the care of the newborn. Present at the conference were Dr. Edmund N. Joyner, III, Associate Professor of Pediatrics, Cornell University and visiting Pediatrician to several New York hospitals, and Dr. Grant Taylor from the Laboratory of Duke University who has made an extensive study of the "Care of the Newborn" at Duke University and the methods for prevention of infections.

It was decided at this time that the adoption of a technique which is being used at Duke University Hospital and the new George Washington University Hospital may be the solution of our problems in this command. The essential features of this technique are as follows:

- a. All normal babies are kept in the rooms with their mothers.
- b. Pre-mature or sick infants are kept under rigid isolation in an isolation nursery.
- c. Not more than two visitors, at one time, are allowed in the room with the mother and newborn.
- d. Visitors are limited to the father and grandparents.
- e. Infants are not bathed from the 1st to the 9th day, inclusive, unless the mothers are scheduled to leave the hospital prior to that date. In such cases, babies are bathed in the presence of the mothers on day of departure.
- f. Once the baby is placed in the room with his mother, he is not removed for any purpose except for such sickness as would require removal to the isolation nursery or for circumcision.
- g. Immediately after delivery, the baby is taken to a sterile dressing station where the excess blood is wiped off the face and head (it may be washed off) and the baby is oiled with sterile oil. After this initial oiling, the baby has its own bottle of sterile oil and is oiled therewith on such parts as necessary, when indicated.
- h. Each baby has his own individual sterile package which is preferably kept in an improvised box under the bassinet. (See sketch page 3)
- i. Nurses who handle babies should not be allowed to handle other patients.
- j. It is not necessary for the nurses to do all the handling of the baby. Trained attendants can do most of this.
- k. Babies should not be given a formula after nursing unless specifically indicated.
- l. A modern formula room should be maintained. Formulas are prepared under sterile procedures using pre-sterilized bottles, nipples and water. After preparation, the bottles of formula are placed in an autoclave under pressure, 7 lbs., maintained for 5 minutes. Upon completion of autoclaving the formulas are cooled before storing in refrigerator. At feeding times each bottle is heated to body temperature.

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m. Nurses and trained attendants who handle babies will wear masks (covering mouth and nose) and wash their hands and dry them on a clean towel before handling the next infant.

n. All personnel who handle infants should have x-rays of the chest, careful physical examinations, and stool cultures. When foreign nationals are involved, examinations should be done by U. S. Army medical personnel.

o. At frequent intervals, nose cultures will be prescribed for attendants.

p. This lying-in period will be utilized to teach the mother how to care for her infant.

If the above rooming-in technique is not adopted and nurseries are continued to be used, a more careful isolation technique will have to be observed with the following being considered as imperative:

a. A minimum of 24 sq. ft. be allowed for each bassinet.

b. Bassinets be placed at least 3 ft. apart.

c. Babies are not to be bathed at a common bathing place but are to be oiled in their own bassinets. Nurses and attendants are to wear face masks and sterile gowns in the nurseries and carefully wash their hands with soap and water and dry them on a clean paper towel after handling each infant.

d. All other precautions quoted above should be in force.

e. A separate nursery must be maintained for isolation cases.

f. If one infant develops diarrhea, he should be placed immediately into an isolation nursery. Should two infants from the same nursery develop diarrhea, both babies must be isolated and the nursery quarantined until all contacts have been discharged. The nursery should be cleaned thoroughly before any new admissions are permitted. With the declaration of quarantine, a temporary nursery should be set up in an available room to which all newly delivered babies can be admitted.

Serious overcrowding in nurseries of the Far East Command constitutes a grave threat to the health of the newborn. Epidemic diarrhea of the newborn causes a known mortality of up to 40%.

The rooming-in plan tends to reduce the chance of cross-infection from infant to infant. The primary advantages of the rooming-in plan are:

a. The reduction of the threat of epidemic diarrhea.

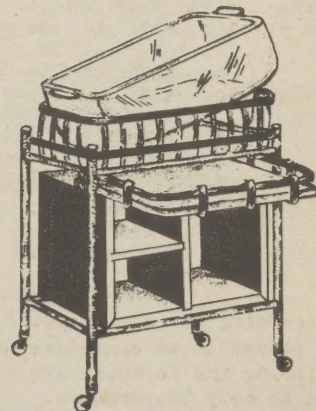
b. Enhancement of the mother-child relationship.

c. The increase in the percentage of babies who can be successfully breast fed.

d. The improvement of the father-child relationship.

It is believed that by the use of trained local personnel (nurses) that no additional professional nursing personnel (U.S.Army) will be required.

The adjacent drawing is a sketch of an improvised wooden cabinet which can be installed within the lower portion of crib's frame-work. A sliding



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shelf should be so devised that it can be extended to either side and serve as a utility table. Cabinet space should be used for the storing of the individual baby's tray (containing boric acid, sterile oil and basin), clothing and equipment. Autoclave drum containing diapers, cotton-balls for oiling, applicators, stockinette bands 5 to 6 inches wide, shirts, 4 by 4 surgical dressings, blankets, would be routinely supplied each unit.

VI. Nursing Time Schedules and Assignment Sheet for Ward Personnel

During discussions at the recent work shop presented by the University of Pittsburgh, (refer Surgeon's Circular Letter No. 7, page 2), time schedules and assignment sheet for ward personnel was one matter of discussion.

Circular 121, Department of the Army, dated 30 April 1948, on the Personnel Policy of the Army aims to clarify and improve the daily working relationships between each individual and unit so that the Army may operate as a team. Army personnel management aims to maintain an organization efficiently administered and effectively managed so that each member of the Army may know his primary duties, to whom he is responsible, and the extent to which he must acquire further knowledge for promotion and advancement.

Effective nursing personnel organization requires specific duties and responsibilities be assigned and understood by each individual.

The following drafts of a Time Schedule and Assignment Sheet are suggested for the Nursing Service within hospitals of the Far East Command:

[illegible]

Duties of Ward Personnel to be Permanently Posted above Time Schedule

Sect. Supervisor (1)	Head Nurse (2)	Staff Nurse (3)	Aide (4)	Ward Attendant (5)	Clerk (6)	Kitchen Attendant (7)
<p>Responsible for adm. nursing sv. in clin. sec.</p> <p>(1) Analyze & evaluate nursing sv.</p> <p>(2) Interpret prin. hosp. management</p> <p>(3) Assist all nursing pers</p> <p>(4) Responsible for supervision, orientation & teaching</p> <p>(5) Recommend procurement of supplies & equip</p> <p>(6) Keep Prin. Chief Nurse informed re nursing sv. and pers.</p> <p>(7) Liaison between sections</p> <p>(8) Assign nurses to wards, supervise time schedule & all nursing pers.</p> <p>(9) Assure high standard of nursing care, housekeeping & discipline</p> <p>(10) Interpret to Head Nurses the policies of Ward 0 and Chief of Service</p>	<p>Responsible to Ward 0 for nursing sv. in one or more wards</p> <p>(1) Supervise all pers. caring for patients</p> <p>(2) Records of med. care and treatment, reports</p> <p>(3) Housekeeping activities</p> <p>(4) Requisitions for supplies & equip.</p> <p>(5) Adm. of medications including narcotics & maint. of register for same</p> <p>(6) Orientation & training of pers.</p> <p>(7) Serving of food in absence of dietitian</p> <p>(8) Assist in discipline</p> <p>(9) Request repairs and re-placements within ward</p>	<p>Assist Head Nurse</p> <p>Substitutes for Head Nurse</p> <p>Prepare and adm. medications, narcotics</p> <p>Therapeutic treatments</p> <p>Assist Med 0 with treatments & diagnostic measures</p> <p>Meet medical & surgical emergencies</p> <p>Watch patient's condition and call Med 0 when necessary</p> <p>Instruct & supervise non-professional nursing pers.</p> <p>Instruct patients in personal hygiene and ward duties</p> <p>Assist in discipline</p> <p>Studies and assists in research of new drugs, special diseases, nutrition & therapeutics</p> <p>Care of supplies & equip</p> <p>Assist in cleanliness of ward</p>	<p>Gives baths Morning & afternoon</p> <p>Care Temperature, pulse, respiration</p> <p>Change linen, beds, care of articles around patients</p> <p>Removing food trays</p> <p>Assist feeding patients</p> <p>Serve fluids, nourishments</p> <p>Care of flowers</p> <p>Cleaning all equipment after discharge of patients (room, bed, matt, pillows, etc)</p> <p>Clean utility rooms</p>	<p>Cleaning floors, windows, latrines</p> <p>Dusting</p> <p>Errands</p> <p>Moving heavy equip</p> <p>Transp</p>	<p>Assist on ward or "Admission & Disch" office</p> <p>work, such as name on entire chart, roster, bed card, routine laboratory slips</p>	<p>Responsible for cleanliness in kitchen, setting up trays, getting supplies, serving food under supervision, carrying trays, returning them to kitchen, washing and sterilizing dishes</p>

VII. Isolation Technique

On recent visits to Army hospitals within the Far East Command, it has been noted that isolation techniques for patients with contagious and infectious diseases do not meet the standards as prescribed by the Medical Department.

In order to improve isolation technique, the following outline is suggested with the recommendation that all Medical Department personnel become familiar with such standard procedure for medical asepsis:

a. Segregation is accomplished by placing patient in:

1. Isolation (patient unit)
2. Ward with similar cases (disease unit)
3. Cubicles (screens, sheets or curtains)

b. Isolation technique is enforced as follows:

1. Patient must not leave room, ward or cubicle.
2. Visitors are not allowed. (Room or ward identified by a sign marked

"Isolation".)

3. As prescribed by ward medical officer, gowns and caps will be worn in patient's room, ward or cubicle. In some cases, it may be advisable to wear a mask and/or rubber gloves. None of these articles should be worn outside the room or ward. Gowns are to be folded and hung with the contaminated side (the outside) out if they are left in the room. (See page 7 for procedure.) They are to be turned inside out (contaminated side in) if they are left outside of room or ward.

4. After any contact with the patient, attendants should scrub. Prior to leaving the room or ward, the hands should first be washed in soap and water (a pan of warm green or soft soap solution is good), then rinsed in water, and then immersed in a disinfecting solution, such as 70% ethyl or denatured alcohol, 2% creosol solution, or 1-2,000 solution of bichloride of mercury.

5. Avoid unnecessary close contact with the patient. Be particularly careful to avoid unnecessary contact with any discharge, and in handling any object contaminated by discharges. If patient coughs or sneezes in close vicinity of attendant, immediately wash face and hands with soap and water. It may be necessary to give patient a mask to protect others.

6. The attendant should develop the habit of protecting himself by keeping his hands away from his own face, hair and body while in isolation room.

7. Fingernails should be kept short.

8. The bed, room and ward must be kept scrupulously clean. If the furniture, walls, or floor become contaminated by discharges they should be carefully washed with a disinfecting solution such as 2% creosol. All floors are considered contaminated, therefore all articles dropped must be disinfected or discarded.

9. The patient's room should be well screened. Insects should be searched for and destroyed. This applies even to those diseases which are not classified under insect-borne diseases, since any insect may become contaminated and thus act as a mechanical carrier and contaminate other objects.

10. The following procedures should be carried out only by personnel who have had instruction in medical asepsis:

(a) Dust daily with damp or waxed cloth, dusting areas next to patient last.

(b) After use in each isolation room, ward or cubicle, fold dust-cloth and place in the contaminated linen bag.

(c) Floor should be wet-mopped daily and at completion, mop should be dipped into disinfectant solution (2% solution of creosol) for 1 hour, scalded, and dried in open air.

(d) Wastepaper baskets should be emptied by attendant into general container outside of unit so that the person mopping floors does not touch anything in the unit.

PUTTING ON AND REMOVING A GOWN IN MEDICAL
ASEPSIS



Putting hands and arms into sleeves touching only the inside of the gown.



Drawing neck of the gown into place and touching only the inside.



Fastening the garment at the back.



Lapping the back edges of the gown.



Drawing the ends of belt into place.



Fastening belt while lapped edges are being held in position.



The garment after properly fastened and belted.



Unfastening neck of the gown after washing hands.



Drawing off first sleeve by slipping finger under cuff.



Drawing off the second sleeve by grasping it through the first sleeve.



The gown hung on a standard with shoulder seams together and only outer contaminated surface exposed.

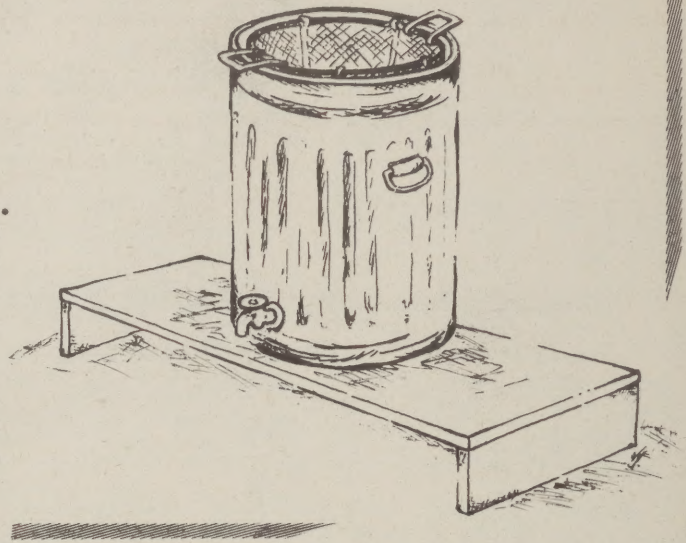
11. Disinfect dishes, utensils, food and linen as follows:

(a) Dishes must be disinfected before being returned to the kitchen. They can be boiled if facilities permit. In small hospitals they may be disinfected after scraping, by soaking in hot water (180°F minimum) for 5 minutes. A 33-gallon can with spigot at bottom for draining and lifting rack (see adjacent sketch) can be satisfactorily improvised. Dishes are then transferred for 1 hour into a 33-gallon can with rack containing 2% creosol solution, after that time they are washed with soap and water. The creosol solution requires changing every morning.

(b) Utensils may be handled in the same manner as the dishes.

(c) Unused food is burned. (Scrape solid foods into paper bag and burn immediately. Liquid and semi-solid left-over food should be scraped into can used for disinfection of feces and urine.)

(d) Bedding and linen are collected separately and must be disinfected before being added to the other laundry. Steam sterilization is preferable but, if this is not possible, disinfection may be accomplished by boiling or by soaking in 2% creosol solution for 1 hour.



12. Disposal of excreta, dressings and rags is accomplished as follows:

(a) Sputum and other discharges from the respiratory tract should be collected in paper cups.

(b) Soiled surgical dressings and cleaning rags are burned.

(c) Feces and urine are best disinfected by adding at least twice the amount of 2% creosol solution and allowing to stand for at least 1 hour.

(d) A clean mattress cover can be used as a laundry bag. Hang on two hooks in utility room making certain a cuff is rolled to prevent contamination of the outside of the bag and string.

(1) With all items and contaminated areas on the inside, close bag. Do not touch string.

(2) Scrub hands, then tie bag.

(3) Label bag of contaminated linen for autoclaving. If autoclave is not available, immerse in 2% creosol solution for 1 hour.

13. It is advisable for each patient to have an individual thermometer.

14. Efficient vaccines or other immunizing substances are available for the prevention of many of the communicable diseases. Potential or actual attendants of cases of diphtheria, cholera, typhoid fever, yellow fever and smallpox are always vaccinated or revaccinated.

15. Immediately after the patient is undressed, his clothing and equipment should be disinfected. Steam sterilization is the most effective procedure for this, but it causes injury to woolen cloth, leather, and metal. Fortunately, in most of the communicable diseases, it is sufficient to thoroughly sun and air clothing and equipment (6 hours). Before they are returned to the patient, woolens should be dry-cleaned; washable clothes laundered, and, if advisable, certain items of clothing and equipment wiped with a disinfecting solution such as 2% creosol. In each case, therefore, the method of disinfection will depend upon the orders of the medical officer.

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16. Equipment may be disinfected in the following ways:

- (a) Boil all boilable articles.
- (b) Soak in 2% creosol solution for 30 minutes, then wash with soap

and water, then air:

- (1) Hot water bottles
- (2) Rubber sheets
- (3) Ice caps and collars

Between patients, articles to be cleansed with 70% alcohol and dried:

- (1) Flashlight
- (2) Otoscope, stethoscope
- (3) Pens and pencils

Articles to be soaked in 2% creosol solution for 30 minutes, washed in soap and water:

- (1) Combs
- (2) Brushes
- (3) Syringes, needles
- (4) Enamelware, etc.

17. Mattresses - If autoclave or sunlight for 6 hours exposure is not available, clean with solution of 10% formalin. Use 1 quart formalin to 4 quarters water.

Isolation technique as usually practiced in military hospitals has been given in detail in the preceding sections. Certain diseases may require some variation, but in general, the above procedures should be followed. Any variations in the prescribed isolation technique are the responsibilities of the ward officer.

REFERENCES:

War Department	-	Medical Department Soldier's Handbook, TM 8-220
War Department	-	Military Sanitation, FM 21-10
War Department	-	Field Sterilizing Equipment Items, TM 8-622
STIMSON, Philip Moen	-	Common Contagious Diseases
TOP, Franklin H.	-	Handbook of Communicable Diseases
PILLSBURY, Mary E.	-	Nursing Care of Communicable Diseases
HARMER & HENDERSON	-	Principles and Practice of Nursing

VIII. Recent Department of the Army and FEC Publications

AR 605-5, DA, 10 May 48. "Commissioned Officers - Officers Appointed in Regular Army". Par 4 - Medical Service Corps. Par 5 - Medical & Dental Officers. Par 6 - Army Nurse Corps & Women's Medical Specialist Corps.

AR 600-35, C-10, DA, 1 June 48. "Personnel" - Prescribed Service Uniform pertaining to Medical Service Corps, etc.

CIR 131, DA 7 May 48. Appointments to United States Military Academy Allotted to Enlisted Men in the Army and Air Force. Par 6 - Physical Examination.

CIR 148, DA, 20 May 48. Medical Officer Procurement - Professional Training Programs.

CIR 150, DA, 24 May 48. Sec VI "Rescission". Par 1, Sec II, Cir 8, WD 1947, pertaining to Maternity Care.

CIR 153, DA, 25 May 48. Stimulating Dose of Immunizing Agents.

CIR 163, DA, 1 June 48. Sec I, Extended Active Duty - amends DA Cir 27, 48, pertaining to physical examination.

G.O. 34, DA, 20 May 48. Sec II. ROTC Units - DC, MC, PC & TC ROTC Units Established.

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SUPPLY BULLETIN 28-4-MED, DA, 31 Mar 48. Replacement Factors and Consumption Rates - Med Dept.

SUPPLY BULLETIN 38-7, C-1, DA, 14 May 48. Regulated Items. Par 5 - Med Dept.

TB MED 80, 20 May 48. Convalescent Treatment Program for Neuropsychiatric Patients.
(Supersedes TB MED 80, 3 Aug 44 and C-1, 14 Oct 44.)

T/O&E 8-77N, DA, 12 May 48. Company, Armored Medical Battalion.

IX. Medical Corps Officers End Course in Basic Science

Twenty-seven Army medical specialists were graduated at the completion of this year's unique 16-week basic science course at the Army Medical Center, Washington, D.C. A similar course is planned for 1949.

The course embraced some of the newest findings and techniques in science and teaching. More than 50 leading doctors and researchers from all parts of the United States and Canada served as guest members of the faculty.

PART II

TECHNICAL

<u>SUBJECT</u>	<u>SECTION</u>
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Chloromycetin in the Treatment of Scrub Typhus.	XI
Dermatitis Associated with Liponyssus Nagayoi	XII
Analysis of Pneumonias Treated at the 28th Station Hospital in Eight Month Period.	XIII
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X. Rh Testing in Pregnancy

The following letter from the Office of The Surgeon General, subject: Rh Testing in Pregnancy, is quoted:

"1. A number of inquiries from the field have indicated that there is some confusion as to the type and application of Rh testing which should be done on pregnant women. The complexity of the whole Rh problem as well as the fact that many problems connected with it have not been solved add to the confusion. Nevertheless, a number of rules may be laid down which should be followed in every case. It should be understood that these rules are minimum requirements and that if indicated, the patient should be promptly referred to a general hospital for more detailed work-up.

a. Every pre-natal patient should be Rh tested at the time she first reports for examination. The test should be performed with standard anti-Rh₀ serum (Item #1-598-610).

(1) If the patient is Rh₀ positive, no further testing will ordinarily be required. However, if there is a history of previous erythroblastotic infants further testing is mandatory and may be indicated if there is a history of transfusion, particularly if reactions occurred.

(2) If the patient is Rh₀ negative, her serum should be stored in the refrigerator (preferably frozen) and the test performed on the patient's husband.

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(a) If he is Rh negative, all samples may be discarded and no further action is necessary.

(b) If the husband is Rh₀ positive, the patient's serum must be examined for Rh antibodies at once and at monthly intervals until the sixth month of pregnancy. From the sixth month on, the examination should be done at intervals of two weeks until labor is established.

b. At any time that antibodies are found or whenever there is an increase in titer, the test should be repeated at weekly intervals and if the rise is sustained or a further increase occurs, the patient should be referred to a general hospital or for expert consultation.

c. A patient who is expected to deliver an erythroblastotic infant should not be delivered at installations not prepared to administer Rh negative blood transfusions to either the baby or the mother. Such patients should be delivered only at hospitals so equipped. A pediatrician should be immediately available to assume charge of the infant.

d. All testing beyond the standard Rh₀ test should be performed at Army Area or general hospital laboratories. Five to ten cc. of clotted blood in sterile containers should be forwarded to the nearest laboratory equipped to perform the testing. Send by air mail if more than 24 hours by ordinary transportation from the laboratory.

e. It is requested that all bloods found to contain Rh antibodies be forwarded to the Blood and Blood Products Section, Army Medical Department Research and Graduate School, AMC, Washington 12, D. C., for confirmation and detailed study, accompanied by a history of all pregnancies and transfusions.

2. For further information on the subject of Rh nomenclature and application in blood transfusion, reference should be made to TB MED 204, "Complications of Blood Transfusion" dated 24 October 1945, and SCIENCE, Vol. 107, pages 27-31, 9 January 1948."

With reference to paragraph 1a(2)(b), when Rh negative pregnant wives with Rh positive husbands are found, periodic studies for Rh antibodies can be carried out at the 406th Medical General Laboratory, APO 500, or the 3rd Medical General Laboratory, APO 900. Ten (10) cc. of clotted blood in a sterile container should be forwarded in a chilled state in each case to the nearest general laboratory by the fastest possible method of transmission. Dry ice should not be used for chilling, since freezing will interfere with the titer. The use of standard medical supply Item 4-087-650, Bottle, vacuum, 1 quart, is recommended. Transmission should be planned so that they will arrive in the laboratory Monday to Friday, inclusive.

XI. Extract from an Article on "Chloromycetin in the Treatment of Scrub Typhus" by Joseph E. Smadel, Theodore E. Woodward, Herbert L. Ley, Jr., Cornelius B. Philip and Robert Traub from the Army Medical Department Research and Graduate School, and the Commission on Immunization of the Army Epidemiological Board, Washington, D.C. and the University of Maryland School of Medicine, Baltimore; and R. Lewthwaite and S. R. Savoor from the Institute for Medical Research, Kuala Lumpur, Malaya.

The antibiotic Chloromycetin was described in 1947 by Ehrlich and his associates. It has been shown by Smadel and Jackson to have a beneficial chemotherapeutic effect when administered to mice or embryonated eggs infected with a number of rickettsial agents or with several viruses of the psittacosis-lymphogranuloma venereum group. The drug is rapidly absorbed when given by mouth to human beings, and readily reaches concentrations in the blood of the order of 40 gamma per cc. No obvious toxic effects attributable to the drug have been observed in the normal men or the patients who have been studied to date. A preliminary note describing the encouraging results observed in a few cases of epidemic typhus who were treated with Chloromycetin early this year in Mexico has been submitted by workers from the Army Medical Department Research and Graduate School and the Instituto Salubridad y Enfermedades Tropicales.

Twenty-five persons with scrub typhus were treated with Chloromycetin during March and April of this year. The chloromycetin used in the work was supplied by Parke, Davis and Company. Each of the patients presented clinical features of the disease. Furthermore, the

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diagnosis was proved in each instance by recovering Rickettsiae tsutsugamushi from the blood taken prior to treatment or by demonstrating the development of agglutinins for the OX-K strain of B. proteus. Rickettsemia occurred in 20 of the 25 patients, and a positive Weil-Felix in 24 of the group.

Eighteen of the treated patients were males and seven, females. Their ages varied from 19 to 55 years with a mean of 33.1. Treatment was begun on the third day of illness in two instances and on the eleventh in one; the mean value for the day Chloromycetin was started in the 25 patients was 6.2. The mean value for the last febrile day of illness in the treated group was 7.5. The shortest period which fever persisted after beginning treatment was 10 hours and the longest 96. The average duration of fever after the first dose of drug was 31 hours.

None of the treated group developed complications or died. One patient who received Chloromycetin on the third day was discharged from the hospital for light work on the ninth day after onset. The first patient in the group was held for observation in the hospital for 28 days. The mean period of hospitalization for the group was 19.2 days.

All 25 patients in the treated group received an initial oral dose of approximately 50 mg. of Chloromycetin per kilo body weight, and were subsequently given 0.2 to 0.3 gm. of drug by mouth every two to four hours for a variable time. During the early part of the present work, treatment was continued until at least the 12th day after onset; these patients received totals of 8 to 15.5 gms. of drug. The duration of treatment was gradually shortened, and the last seven cases were given the drug for only 24 hours; these received a total of about 6 gms. during this period. Their responses with this short regime were as satisfactory as with the longer periods of therapy.

Chloromycetin is highly efficacious in the treatment of patients with scrub typhus. It is simple to administer, and has not been found toxic for man.

XI. Dermatitis Associated with Liponyssus Nagayoi by Lt. Colonel John A. Booth, MC, Commanding Officer, 1st Lieut. Benjamin D. White, MC, Chief, Pediatric Service, and 1st Lieut. Raphale L. Robbins, MC, Chief, Medical Service, of the 5th Station Hospital, APO 994.

During the first three months of 1948, the Pediatric Service of the 5th Station Hospital, in central Honshu, observed a large number of cases of dermatitis. Of these cases, the majority were due to fungi and responded to the appropriate therapy. However, the most striking of all these dermatitides was one, the cause of which we had not become aware until recently.

This skin condition seemed to occur in children between the ages of two and five years. It was characterized by a papular type of rash and was most commonly seen about the legs, arms and skin folds. It was seen with less frequency about the scalp. There was a marked degree of pruritis and, consequently, the involved areas were very often scratched raw, and were found to be, in many cases, secondarily infected. The rash was apparently not spread by scratching.

In attempting to clear up this condition, the usual stand-by ointments were found to be of no avail, and such medications as salicylic acid ointment, pragmatar, sulfur ointment, and ultra-violet light were not beneficial.

The etiology of this condition was obscure until one day a patient's mother brought in her child who had the classical lesions of this disease. She also brought to the hospital a small pin-point size organism which she had found on the child. Under ten power magnification, the parasite was readily identified as the Liponyssus nagayoi, the rat tick. This tick was first identified by Yamada in 1932, as a common parasite of rats in Japan. The organism is said to produce vesicular and papular lesions at the site of puncture of the human skin. These puncture wounds are formed when the tick sucks blood, and are characterized by severe pruritis. The parasite is said to attack children particularly. This organism is potentially dangerous in that

it can be a vector for endemic typhus, plague and possible relapsing fever.¹

Although the presence of this parasite near the patients does not mean, per se, that it is the etiological agent, the description of the lesions caused by L. nagayoi is so strikingly similar to those seen at this hospital, that we have become convinced of the cause and effect relationship. Absolute proof, however, is lacking.

Topical application of phenolated camphor in a petrolatum base was found to be most effective in relieving the pruritis associated with this condition.

In investigating the habitation of this tick, it was found that large colonies of them existed throughout the woodwork of some of the dwellings on this base. After a single application of stock DDT in kerosene, no parasites were found twenty-four hours later.

1. Craig, C.F. and Faust, E.C. Clinical Parasitology 3rd Ed. Lea & Febiger, 1943.

III. Analysis of Pneumonias Treated at the 28th Station Hospital in Eight Month Period by 1st Lieut. Arnold L. Berenberg, MC, Chief of Communicable Disease Section, 28th Station Hospital.

In the past 8 months we here at the 28th Station Hospital have seen a fair number of cases of pneumonia, most of which have come from the Southern Honshu Area. This paper is a survey of 50 of these cases. They were admitted from three main sources. Some were admitted as direct transfers from local dispensaries, others were admitted as transfers from the surrounding station hospitals, and a number from our own hospital dispensary.

During the past few years in civilian hospitals the incidence of pneumonia has dropped significantly since most of these cases are treated at home with the usual chemotherapeutic agents and do not require the exhaustive and expert care of a hospital. Some investigators have postulated that there is an actual decrease in the incidence of lobar pneumonia and the the pneumococcus organism is no longer the virulent one that it was 10-15 years ago.

These cases were interesting to us in that 31 of them were lobar in type and the remaining 19 were atypical.

In differentiating on admission, the lobar pneumonias from the atypical pneumonias the history that was elicited from the patient was an extremely important factor. It was often one of the best clues as to what type of pneumonia we were to treat. For example, among the lobar pneumonias the average number of days from the onset of symptoms until the patient was seen by the physician were 4.5 days. In this group the longest number of days were 14 and the shortest length of time was three hours. In the latter case of three hours physical and clinical signs were present on admission of a left lower lobe infiltration but not apparent on x-ray until 8 hours later.

Among the atypical cases of pneumonia the average number of days of the present illness obtained in the history were 10.5. One may say approximately double the time of lobar pneumonias. The longest number of days were 36 while the shortest length of time was three days. This was due in part to the reluctance of the patient with atypical pneumonia to report at sickcall.

The complaints presented to the physician by the patient with lobar pneumonia were practically always more distinct, more discrete, and more severe than those offered by the patient with atypical pneumonia. Among the 31 cases of lobar pneumonia 22 of the patients gave a definite history of chest pain, 14 described a definite shaking chill, and eight reported episodes of having coughed up bloody sputa. One patient complained only of a severe right earache, while another patient's chief complaint was severe right lower quadrant pain.

Almost all of the patients in both groups of cases gave a history of a cough. However, the cough associated with the lobar cases of pneumonia was more severe and more often productive

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of sputum while the cough associated with the atypical form was dry, hacking, and usually non-productive in nature.

Most of the complaints associated with the atypical forms of pneumonia were of a vague character. The patients did not appear to be very concerned with themselves and usually did not show the degree of anxiety that we associate with a case of lobar pneumonia. The complaints of the viral pneumonias tabulated from this series were in order of frequency a dry and nonproductive hacking cough, vague muscular aches and pains, headache, feeling feverish, loss of appetite, weight loss, thirst, and chilly sensation but seldom a frank chill. Four of the patients gave only a history of weight loss, fatigue, and general malaise. In summation it would be said that the patients with lobar pneumonia appeared acutely ill as compared to the patients with atypical pneumonia who appeared chronically ill.

Very little could be deducted from the past history. Only two of the patients with atypical pneumonia and only 6 of those with lobar pneumonia gave a history suggestive of previous pulmonary disease.

The type of Army duty that the patient performed had little or no relationship to the degree of severity of the disease or as to what type of pneumonia was more apt to occur. Thirty of the patients from the total of 50 cases performed duty out of doors while the remainder had inside duty. Fourteen of the total of 31 cases of lobar pneumonia occurred in patients who had indoor duty, while this was true of 8 of the atypical group of patients.

On physical examination, as stated previously, the patients seen with lobar pneumonia appeared acutely ill. Cyanosis to some degree was noted in 12 of the 31 patients while it was a very infrequent finding in the atypical pneumonias. In only one of the 19 cases of atypical pneumonia was cyanosis described, and it was described as being very mild.

The average temperature on admission of those patients proven to have lobar pneumonia was 102.6°F. The highest temperature recorded in this group was 106°F. and the lowest was 99.4°F. Among the atypical cases of pneumonia the average degree of temperature was 100.4°F., the highest recorded as 103°F. and this dropped significantly when the patients had been adequately hydrated. As a rule the temperature as one means of differential diagnosis could not be relied upon since many of the patients had received at one time or another on the outside some antipyretic compound, usually aspirin.

The peripheral pulse rate in the lobar cases averaged 115 per minute while in the atypical cases the pulse was less rapid ranging about 88. A moderate difference was also noted in the respiratory excursion rate. The average rate was 18.

It was interesting in tabulating these results to note the frequency each lobe was involved. In the lobar form of pneumonia the right lower lobe and the left lower lobe were involved an equal number of times. The right middle lobe was next most often involved. Only three cases had involvement of the upper lobes. Two of the latter three cases were tuberculous pneumonias. In the 19 cases of atypical pneumonia, as in the lobar cases, the right lower and the left lower lobes were involved an equal number of times. The right middle lobe was involved only once. One of the patients had a migrating form of pneumonia, first having involvement of the upper lobe, then the right lower lobe, and then finally the left lower lobe. From the 39 cases of lobar pneumonia there were two patients who had more than one lobe involved at the same time. From these cases we may summate that both types of pneumonias occur most frequently in the lower lobes and that frequently the right middle lobe is involved in lobar pneumonia. One fact is certain, that is that it would be unwise to judge the type of pneumonia the patient has by what lobe is found to be involved. It was our experience that the physical signs of lobar pneumonia were far more definite than in those cases of atypical pneumonia and that we were often surprised with the marked degree of infiltration noted on the x-ray film in the atypical forms compared with the minimal signs found on physical examination.

All of the patients admitted after a thorough physical examination when feasible were sent to the Roentgen Department and a wet PA chest reading was obtained. Following this blood was withdrawn for a complete blood count, sedimentation rate, and Kahn. Urine was then obtained for complete analysis. If any patient had a temperature over 101 or a history of a chill, a blood culture was taken routinely before any therapy was instituted. If at all possible

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a sputum sample was obtained for culture. Because of lack of materials and personnel, no organisms were typed. Following this the patient was started on some form of chemotherapy. Penicillin was always the drug of choice and the dosage employed varied with the clinical appearance of the patient. Usually if the patient appeared very toxic, acutely ill, and dehydrated he or she was given initially an intravenous solution of 1000 cc 5% glucose and saline often containing 100,000 units of penicillin. This was then followed with 60,000 units of penicillin I.M. every three hours for three days, and the dosage was then reduced to either 20,000 or 40,000 units for another three days. Among those cases of atypical pneumonia, if the patient on admission appeared acutely ill it was found advisable to give him some form of chemotherapy combined with supportive therapy for the first three hospital days, following which the drug employed was discontinued. We employed in the two cases of tuberculous pneumonia, both proven with sputa found to be loaded with acid-fast bacilli, 3 grams of streptomycin I.M. per day. Both of these patients had clearing of the pneumonic process following one week of therapy. In both of these cases underlying cavitation was noted after the pneumonic area had disappeared.

We were very fortunate in that in our 50 cases of pneumonia very few complications were noted. Four patients despite penicillin therapy developed pleural effusions. All four of these patients had a picture of lobar pneumonia on admission. None of these effusions were considered large enough for thoracentesis and all of these cleared readily with bed rest alone. One case of pneumococcus lobar pneumonia was penicillin fast. This patient gave a history of having had pneumonia one year previously to admission and treated with penicillin. He was first started on penicillin and showed a mild resolution of his pneumonic process by physical examination and x-ray on the third hospital day. However, on the 4th hospital day he began to complain of right costal margin pain accentuated with inspiration. Investigation revealed an increase of the pneumonic infiltration associated with a rise in w.b.c. but not in temperature. Penicillin was discontinued and sulfadiazine therapy instituted and he made an uneventful rapid recovery. Six out of the total of 19 cases of atypical pneumonia had an increase of infiltration during their hospital stay. One 34 year old female dependent was admitted and found to have a right atypical pneumonia. Following the clearing of this process an underlying lung abscess was noted. She was then started on penicillin inhalations and in three weeks had made an uneventful recovery with complete closure of the abscess cavity.

In two of the 50 cases of pneumonia complete physical examination revealed more serious concomitant disease. One of these, a 38 year old sergeant in the air forces was found to have choked discs, a blood pressure of 210 systolic and 160 diastolic and urinary and blood chemistry findings consistent with a diagnosis of malignant nephrosclerosis. The other, a 25 year old negro with a left lower lobe atypical pneumonia had a resistancy to abdominal palpation in his left upper quadrant. Further investigation in this case revealed a left retroperitoneal mass. Both of these patients were evacuated to the zone of interior for further investigation.

The average number of days that each patient was hospitalized because of pneumonia was somewhat longer than found in civilian life. The main reason for this delay in discharge from the hospital was that all of the patients were given enough time to convalesce completely in order that they could be returned to their stations on full duty status. The average number of hospital days in the lobar group was 18 days. In the atypical cases of pneumonia the average number of days was comparatively speaking not too much longer being 22 days.

The differential diagnosis of pneumonia and other conditions was not always an easy one without the aid of the x-ray on admission. By far the most difficult diagnosis to make on clinical and physical signs and symptoms were in the atypical group. For it was here that the admission diagnosis and final diagnosis were most often different, bronchitis, acute or chronic was most often mistaken for pneumonia, or vice versa. Some patients were suspected to have influenza, tuberculosis, acute surgical abdomens, and some of the exanthemata. One 26 year old white EM entered the hospital with a history of having a hacking cough productive of a clear mucoid sputum for 3 days duration, fever of two days duration, and a sharp right costal margin and right shoulder pain accentuated with each inspiratory and two episodes of shaking chills on the day of admission. On physical examination, his chest was clear and he had free diaphragmatic motion. However, abdominal examination revealed the liver to be very tender and enlarged down to the right anterior iliac crest. After a thorough investigation, a diagnosis of amoebiasis was made and he responded well to Emetin NCQ. A rather large number of suspected cases of pneumonia were found to have tuberculous parenchymal infiltrations and these were evacuated to the zone of interior after activity had been determined. In any case of pneumonia tuberculosis must be a

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main factor in the differential diagnosis. This is particularly true in this area of the Far East Command. So great is the frequency of tuberculosis among the troops and the Japanese people that we here at the 28th Station Hospital suspect each patient with pneumonia of having tuberculosis until it is conclusively proven otherwise.

In summary we may say that the greater number of cases of pneumonia admitted here in the past 8 months period were lobar in type; their histories were typical in most cases; the lower lobes were most often involved, all except one case responded well to penicillin; the complications were few, and that always tuberculosis should be suspected.

XIV. Army Doctors Hear Results of Studies of Effect of Diet on Weight

There is only one way to get fat -- by overeating.

The body takes in more than it puts out and the excess is stored in the chemically highly complex fat tissue. In extreme cases human beings have stored up an excess of as much as 200 pounds.

This conclusion, reached only after years of experimentation in both the United States and Europe have failed to find any other logical cause for overweight, was stressed before officers of the Army Medical Corps attending a course in basic science at the Army Medical Department Research and Graduate School, Army Medical Center, Washington, D.C., by Dr. Louis H. Newburgh, Professor of Clinical Investigation, Department of Medicine of the University of Michigan Medical School.

For the past half century all sorts of hypotheses have been advanced, blaming excessive fat accumulation on glandular deficiencies or over-activity, defects in the brain, and hereditary tendencies to obesity. Some of these have seemed quite attractive at first, Dr. Newburgh said, but one after another their validity has been destroyed by controlled experiments with animals and humans. Overeating and under-exercise remain the only recognizable basic causes.

It was long supposed that certain pathological conditions of obesity resulted from deficient secretion of one of the hormones from the anterior lobe of the pituitary gland in the brain. This was known as Cushing's syndrome after the late Dr. Harvey Cushing, one of America's greatest brain surgeons, who advanced the hypothesis. Removal of the pituitary in animals has produced no such effect, Dr. Newburgh said. In humans anterior pituitary deficiency does cause a condition that can be mistaken for obesity, especially in women. But there is no notable increase of weight. Abdominal walls are weakened so that the internal organs tend to bulge outward, but there actually is no more fat than before.

Another hypothesis which seemed valid for a time was that some states of obesity were due to injuries of the hypothalamus, one of the basal structures of the brain. Dogs could be made to grow fat by injury to this organ. It has been shown, however, that in these animals there was also rather widespread injury to other parts of the brain. In rats, where the hypothalamus is well walled off from the rest of the brain, experimental injury invariably produced, among other results, loss of weight as long as the rats were kept on their average diet. However, if they are given all they want to eat, obesity results, as there is a great increase in appetite. Tests with monkeys have not shown any influence of the hypothalamus on fat deposition, and it is highly likely that the same holds true for humans. The hypothalamus is affected by encephalitis. Some victims of this malady become markedly obese, and this has been taken to prove the hypothalamic hypothesis. The facts are, said Dr. Newburgh, some get fat, some get thin, and in the majority there is no change of weight. Statistical studies give no validity to the assumption. The easiest explanation for a possible undue proportion of fat people among encephalitis victims, he said, is that the disease tends to restrict activity, but not appetite.

Mothers sometimes explain fatness of children by talking of "lazy glands". They supposedly mean that some gland of internal secretion is not functioning properly but neither

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they nor their family physicians can tell which gland is at fault. In most such cases, Dr. Newburgh said, it will be found that the child's activity has been restricted -- possibly after a severe illness with fear of some heart malady -- while the appetite has remained as good as ever.

Often the best way to reduce the weight of such children, he said, is to get them away from home and the watchful eyes of their mothers. Heartless comrades will spur them to normal activity, and thereby make them normal boys and girls. There is no scientific evidence whatsoever for "lazy glands".

"My associates and I," said Dr. Newburgh, "have been especially interested in the obesity of young adults that had its onset years earlier in association with an illness. Careful questioning is usually rewarded by the discovery that the mother has been instructed to prevent all physical activity on the part of her child, who has just passed through an illness that was thought to have caused heart disease. Even though activity is cautiously increased months later, the young patient continues to be taught to avoid exercise and to guard against heart strain. The mother, not realizing that the need of food is greatly reduced in such circumstances, and still under the sway of the time-honored belief that recovery will be greatly enhanced by full feeding, spares no effort to tempt the child to eat. The young patient, suffering from self-pity and egoism, accepts the food even though he has no inherent desire for it. Conditioned reflexes become firmly developed and the feeling of satiety does not develop until the child has over-eaten, in the physiological sense."

It has been demonstrated that it is possible to breed fat rats and the claim has been made that there is an obesity gene. Dr. Newburgh and his associates have repeated some of these breeding experiments. Their work is still preliminary but they already have found that the supposed "obese" strain are greater eaters than other rats. Apparently a voracious appetite is inherited rather than an abnormal tendency to become fat.

Fat people like to make the excuse that obesity "runs in the family", thus throwing the blame on their ancestors and placing the condition beyond their control. To date, Dr. Newburgh said, there is no good evidence for hereditary fatness, especially in humans. Quite the opposite appears from observations on identical twins who come from the same ovum and hence have exactly the same heredity. In most respects, physically and mentally they remain very similar throughout life and any differences can be attributed entirely to environment. The greatest variant of all is found in weight.

Body build is inherited. Certain builds, like that of the English bulldog, may give the superficial appearance of obesity -- but there is no increase in weight.

Dr. Newburgh concluded: "Obesity is never produced by increased or diminished activity of an endocrine gland. No internal secretion is capable of so changing the metabolism that the total amount of fat in the body will increase unless the inflow of calories is greater than the outflow."

Thus it all comes down to a question of appetite. Particularly in humans, Dr. Newburgh pointed out to the Medical Corps officers, this is an inadequate guide to proper eating. It is affected by education, by family, local and racial customs, and emotions so that it no longer has any close relationship to hunger. Ideally, one would eat only when hungry and there probably would be no fat people.

"Appetite," he said, "is, strictly speaking, a sensation produced by happy memories. Desire for food may be an expression of real hunger, but it is more generally a response to habit or to the anticipation of pleasure. Fright, fear, sorrow, illness, and displeasing sights and smells depress or even abolish it. It is stimulated by foods that give off pleasant odors, that please the eye and the palate. Happy recollections and good companionship are conducive to overeating."

It long has been recognized that women crossing middle age tend to get fat. They often are assured that this is due to sex gland changes accompanying the menopause. There is no such relationship known, Dr. Newburgh said. This, however, is the stage of life when

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women tend to become less active. At the same time fashion no longer dictates a slim figure. Hence they become careless of eating, especially candy, and grow fatter and fatter, consoled by the assurance of their friends that this is inevitable and that they can do nothing about it.

More obscure is the emotional spur to overeating. Some take to food in time of trouble as others take to drink, and both appetites are likely to pass beyond the control of the individual.

"There are persons," Dr. Newburgh said, "who are struggling with a problem -- sexual, social or financial -- for which they can find no solution. But they have discovered that they obtain temporary solace by eating. For them food acts as a balm, as alcohol does for others who find life too hard. We have seen many obese patients who, either deliberately or without being aware of the situation, have turned to food as a means of relieving pent-up emotions."

"Weight," he continued, "always can be reduced by adherence to a restricted diet, but cooperation by the patient is unlikely until the nature of obesity is elucidated and his particular reason for overeating has been discovered and explained to him. Lack of immediately disabling features and of severe pain make it so easy to find excuses for delaying treatment. Most patients are unaware of the threat to life that obesity entails."

"It is necessary to walk 36 miles to rid the body of one pound of fat," Dr. Newburgh stressed. "Therefore, eating of a low caloric diet is more important than exercise as a weight-reducing measure." He warned against giving thyroid and other preparations except in exceptional circumstances. They seldom do any real good for a protracted period, and they confirm the patient in his cherished belief that his fatness is due to some cause beyond his control, consequently he eats as much and remains as lazy as before.

XV. Neurotropic Virus Diseases by Col. Robert E. Blount, MC, Medical Consultant, General Headquarters, Far East Command.

With the advent of the poliomyelitis and Japanese B encephalitis season in the Far East Command, it is felt that every medical officer should be familiar with at least the following references:

a. TB MED 193, 31 Aug 45. This concise treatise covers poliomyelitis in a scholarly fashion. Since its publication authoritative investigation has proven the value of prophylactic tracheotomy in cases with bulbar involvement. vide infra.

b. Baker et al - "The Bulbar Form of Poliomyelitis." I. Diagnosis and the Correlation of Clinical with Physiological and Pathological Manifestations," JAMA 134:757 (28 Jun) 1947.

c. Ibid, "Bulbar Form of Poliomyelitis," II. Therapeutic Measures Based on Pathologic and Physiologic Findings, JAMA 135:425 (18 Oct) 1947.

The above two articles place the therapy of bulbar poliomyelitis on a rational basis.

d. TB MED 212, Neurotropic Virus Diseases, 16 January 1946. This concise bulletin presents in tabular form information concerning the various neurotropic virus diseases, covering spinal fluid and other laboratory and clinical findings that cannot be found in any single volume short of Merritt and Fremont's monograph "The Cerebrospinal Fluid."

e. Preliminary report of activities of Field Team of Army Epidemiology Board in the FEC by W. McD. Hammon, et al, Surgeon's Circular Letter No. 11:5, Medical Section, GHQ, FEC, 1 January 1947.

f. Poliomyelitis Summary, 361st Station Hospital, Captain F. J. Mayer, MC, Surgeon's Circular Letter No. 11:15, Medical Section, GHQ, FEC, 1 November 1947.

g. Robert E. Priest, et al, "Tracheotomy in Bulbar Poliomyelitis, Surgeon's Circular Letter No. 10:27, Medical Section, GHQ, FEC, 1 October 1947.

h. P. M. Stimson, "A Manual of Common Contagious Diseases," Lea and Febiger, 4th Edition, 1947. The chapter on poliomyelitis is splendid from the standpoint of diagnosis and general principles of management. Insufficient stress is placed on the importance of tracheotomy in the management of bulbar cases.

i. W. D. Kubicek, et al, "Physiology of Respiration as Applied to the Treatment of Bulbar Poliomyelitis," Archives of Physical Medicine, 29:84 (Feb) 1948.

j. National Foundation for Infantile Paralysis publications:

- (1) The Use of The Respirator in Poliomyelitis.
- (2) Nursing Care of the Patient in the Respirator.
- (3) Guide for the Nursing Care of Poliomyelitis.

Sets of these pamphlets have been distributed to every hospital in the Far East Command. This material can be studied with profit by the physician as well as the nurse.

k. A. B. Sabin, "The Epidemiology of Poliomyelitis," JAMA 134:749, (28 Jun) 1947.

l. TB MED 181, Japanese B Encephalitis, 6 April 1947.

m. PMF 5048, Japanese B Encephalitis. This color film is one of the best medical teaching films ever produced.

n. Radiogram ZX 49301, FEC, 17 May 1948.

General Measures. The following is quoted from Stimson's "Manual of Common Contagious Diseases":

"No satisfactory method for immunization against poliomyelitis being as yet available, only general measures can be recommended. In the presence of poliomyelitis in a community, everybody would do well to observe the following simple suggestions:

1. Don't take any drug or chemical aimed to protect against infection. There is none that will protect satisfactorily. Similarly don't use special nose drops or gargles. The mucus on the mucous membranes has protective values.
2. Treat any minor illness with immediate bed rest. It might be a poliomyelitis infection and easily made worse by "keeping going".
3. Similarly, even healthy individuals should avoid exhaustion due to chilling or fatigue. This would aggravate a possible incubating infection.
4. Avoid insults to the nasopharyngeal mucous membranes such as tonsillectomies or tooth extractions. It might cause the difference between a symptomless carrier and a severe, even fatal, bulbar case.
5. Avoid the use for drinking, swimming, or washing utensils, of any water possibly contaminated by sewage. Many apparently healthy people pass the virus in their stools, and sewage has been shown to contain active virus.
6. Suppress flies, and in particular protect food from fly contamination. Also keep flies away from privies and cesspools. Milk for drinking should be pasteurized or boiled.
7. Avoid unnecessary personal exposures, such as in movies and other crowded places; also particularly avoid kissing, the use of a common drinking cup and other types of contacts with nasopharyngeal secretions. Avoid traveling to an epidemic area, but fleeing from an epidemic area is usually useless, because too late.
8. Finally, avoid hysteria and panic. Continue to lead a normal healthy life with special attention to proper clean food, elimination, rest, fresh air, and moderate exercise. Cleanliness of person and of environment should constantly be enforced.

By such measures an individual can perhaps be protected against a dose of the virus large enough to cause the typical disease with paralysis. It is probable that one can hardly hope to escape all exposures, and the child who has been constantly sheltered is all too susceptible when the exposure does come. In fact, occasional slight or subclinical exposures are probably necessary for building up immunity."

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PART III - STATISTICAL

Evacuation

During the period 1 May to 28 May 1948, the following patients were evacuated from the several major commands:

Evacuations of military personnel per thousand strength for the period 1 May to 28 May 1948 were as follows:

	<u>AIR</u>	<u>WATER</u>	<u>TOTAL</u>
JAPAN	171*	9*	180*
KOREA	54**	30	84**
MARBO	15	0	15
PHILRYCOM	54	12	66

JAPAN	2.1*
KOREA	2.4
MARBO	.62
PHILRYCOM	1.2
THEATER	2.0

* Includes air evacuees from Korea

** Patients evacuated to Japan for onward Evac.

Hospitalization

1. The bed status as of 28 May 1948 was as follows:

	<u>Total T/O Beds Auth</u>	<u>Total T/O Beds Establ</u>	<u>Total T/O Beds Occupd</u>
JAPAN	4,450	4,423	1,885
KOREA	2,050	1,145	643
MARBO	825	448	275
PHILRYCOM	2,350	2,275	1,153
THEATER	9,675	8,291	3,956

2. The percent of T/O beds and established beds occupied as of 28 May 1948 were as follows:

	<u>Percent Auth T/O Beds Occupd</u>	<u>Percent of Establ Beds Occupd</u>
JAPAN	42	43
KOREA	31	56
MARBO	33	61
PHILRYCOM	49	51
THEATER	41	48

3. Admission rates per thousand troops per annum for the four (4) week period ending 28 May 1948 were as follows:

	<u>THEATER</u>	<u>JAPAN</u>	<u>KOREA</u>	<u>MARBO</u>	<u>PHILRYCOM</u>
All causes	552	681	584	276	449
Disease	494	613	521	234	398
Injury	60	69	62	42	52
Psychiatric	15	13	29	14	9.1
Rheumatic Fever	2.4	2.4	5.7	.58	1.5
Common Respiratory Disease	69	78	97	13	62
Influenza	2.0	2.9	0	1.7	2.1
Primary Atypical Pneumonia	4.4	2.4	8.5	.58	6.7
Common Diarrhea	4.9	1.2	6.9	1.2	12
Bacillary Dysentery	1.1	.34	1.6	0	2.6
Amebic Dysentery	2.7	.34	4.0	.58	6.7
Malaria	5.9	1.2	4.9	0	18
Infectious Hepatitis	3.9	4.0	4.4	3.5	3.5
Mycotic Dermatoses	9.4	13	17	0	2.6
Venereal Disease	89	127	87	25	57

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The editor of the Surgeon's Circular Letter extends an invitation to all personnel of the Medical Department to prepare and forward, with a view to publication, articles of professional or administrative nature. It is assumed that editorial privilege is granted in reviewing the copy submitted for publication. Authors are urged to keep their papers brief. Articles should be forwarded so as to reach the Medical Section, GHQ, FEC, not later than the 20th of the month preceding the publishing of the Circular in which it is desired.

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